

### **What is Claimed is:**

1. A composite fan, comprising:

5 a first fan which has a plurality of first rotary vanes and a plurality of first guide vanes located on an air outlet side of the first rotary vanes; and

a second fan located on an air outlet side of the first fan having a plurality of second rotary vanes and a plurality of second guide vanes located on an air inlet side of the second rotary vanes, each of the second guide vanes being corresponded to and coupled with each of the first guide vanes to form a continuous curved surface.

10 2. The composite fan of claim 1, wherein each of the first guide vanes is connected radially to a first support section.

3. The composite fan of claim 2, wherein the first support section houses a first driving device to drive the first rotary vanes to generate airflow.

15 4. The composite fan of claim 3, wherein each of the first rotary vanes is connected radially to a first hub which is coupled on the first driving device.

5. The composite fan of claim 1, wherein each of the second guide vanes is connected radially to a second support section.

6. The composite fan of claim 5, wherein the second support section houses a second driving device to drive the second rotary vanes to generate airflow.

20 7. The composite fan of claim 6, wherein each of the second rotary vanes is connected radially to a second hub which is coupled on the second driving device.